

FORAGE HARVEST MANAGEMENT

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 511



FORAGE HARVEST MANAGEMENT

The cutting and removal of forages from the field as hay, greenchop, or ensilage.

PRACTICE INFORMATION

This practice applies to all land uses where machine harvested forage crops are grown. It is designed to help the farmer or rancher optimize the economic yield of forage at the desired quality and quantity. In addition, the practice provides the following functions:

1. Promote vigorous plant growth for improved ground cover and protection from erosion
2. Soil improvement provided by healthy vigorous plants that increase soil organic matter, root channels, water holding capacity, earth worms, etc
3. Maintain stand life for the desired time period
4. Maintain desired species composition

5. Use forage plants as a nutrient uptake tool to utilize or reduce excess plant nutrients available in the soil

6. Provide food and cover for wildlife

The following management concepts are considered in the specifications of this practice:

1. Stage of maturity and harvest interval
2. Moisture content for cutting silage/haylage as well as baling as hay
3. Length of cut for silage/haylage
4. Stubble height maintained for plant health and vigor
5. Management considerations that help improve wildlife food and cover
6. Additional considerations needed to help control disease, insects, and weed infestations

Additional information including standards and specifications are on file in the local NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields

STATE	Iowa	FIELD OFFICE		DATE	12/5/96
PRACTICE: 511 Forage Harvest Mgt.			NOTES:		
RESOURCE: SOIL			Help Message: Click on form field for choice lists.		
RESOURCE CONCERN: EROSION			Tab key to move around. "N/A" is the default.		
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			significant reduction in sheet and rill erosion		
WIND			significant reduction in wind erosion		
EPHEMERAL GULLY			significant reduction in ephemeral gully erosion		
CLASSIC GULLY			slight reduction in classic gully erosion		
STREAMBANK			slight reduction in streambank erosion		
IRRIGATION INDUCED			significant reduction in irrigation induced erosio		
SOIL MASS MOVEMENT			insignificant		
ROADBANK/CONSTRUCTION			N/A		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			significant improvement in soil tilth		
SOIL COMPACTION			moderate reduction in soil compaction		
SOIL CONTAMINATION					
• SALTS			slight reduction in soil salinity		
• ORGANICS			significant decrease in organic contaminates		
• FERTILIZERS			significant reduction in contaminates from fertil.		
• PESTICIDES			significant reduction in pesticide contam./soil		
• OTHER					
DEPOSITION/DAMAGE					
• ONSITE			significant reduction/onsite deposition damage		
• OFFSITE			significant decrease/offsite deposition damage		
DEPOSITION/SAFETY					
• ONSITE			significantly improve onsite safety/deposition		
• OFFSITE			sign. improve offsite safety hazard/deposition		
OTHER					
RESOURCE: WATER					
RESOURCE CONCERN: WATER QUANTITY					
SEEPS			slight increase in seepage hazard		
RUNOFF/FLOODING			sign. decrease in runoff/flooding		
EXCESS SUBSURFACE WATER			significant reduction in excess subsurface water		
INADEQUATE OUTLETS			significant improvement in H2O outlet concern		
WATER MGT. IRRIGATION					
• SURFACE			moderate improvement in irrigation efficiency		
• SPRINKLER			moderate improvement in irrigation efficiency		
WATER MGT. NON-IRRIGATED			significant improvement in moisture use		
RESTRICTED FLOW CAPACITY					
• ONSITE			insignificant		
• OFFSITE			N/A		
RESTRICTED STORAGE			sign. reduction in sedimentation of H2O storage		
OTHER					

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	slight reduction GWater contam./pesticides
• NUTRIENTS AND ORGANICS	sign poten. decrease/GWater contam./nutr,organ.
• SALINITY	insignificant
• HEAVY METALS	insignificant
• PATHOGENS	N/A
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	sign. reduction in SWater contam./nutri.,organics
• SUSPENDED SEDIMENTS	sign. reduction in SWater contam./susp. sedi.
• LOW DISSOLVED OXYGEN	sign. reduction in SWater contam./low oxygen
• SALINITY	moderate reduction in SWater contam./salinity
• HEAVY METALS	N/A
• WATER TEMPERATURE	N/A
• PATHOGENS	slight decrease in SWater contam./pathegens
AQUATIC HABITAT SUITABILITY	significant improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• OFFSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• ONSITE STRUCT. PROBLEMS	N/A
• OFFSITE STRUCT. PROBLEMS	N/A
• ONSITE HEALTH	N/A
• OFFSITE HEALTH	N/A
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	sign. decrease in airborn sediment/convey. prob.
AIRBORNE CHEMICAL DRIFT	slight decrease in airborn chem. drift
AIRBORNE ODORS	N/A
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	slight improvement in air condition/temperature
AIR MOVEMENT (windbreak effect)	insignificant
HUMIDITY	N/A
OTHER	

[illegible]

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	N/A
PRIVATE/PUBLIC VALUES	N/A
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	N/A
SIGNIFICANCE OF CULTURAL RESOURCES	N/A
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	N/A
OTHER	